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Preliminary Ecological Appraisal and Preliminary Roost Assessment

Survey site: Frognal Rise House, 16 Lower Terrace, Hampstead, London, NW3 6XB

Client: Redfrog Property Limited

Survey date: 26th March 2025

Project:
This report is prepared to inform a planning application with the London Borough of Camden. The proposal is described as: To reinstate the garden room in its original position as well as associated landscaping.

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

PEA survey methodology and legislation can be found in the Arbtech Supplement: **PEA Methodology and Legislation - 2024.**
PRA survey methodology and legislation can be found in the Arbtech Supplement: **PRA Methodology and Legislation - 2024.**

The site survey was undertaken by Josie Cooper MSc (Accredited Agent on Natural England Bat licence number: 2019-41480-CLS-CL18).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (mph)	Rain
26/03/2025	17	49	20	3	None.

Ecological Survey Factor **Conclusion, Impact or Recommendations**	**Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.**
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, and proposal plan in appendix 3). **Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).**	
Summary of Survey Findings **(***UKHab codes used)*	<u>Site location</u> The survey site is centred on National Grid Reference TQ 2616 8603 and has an area of approximately 0.09ha. The site is located within Hampstead, London. Hampstead Heath is located to the north and east of the site, whilst Primrose Hill is located to the south of the site. <u>Offsite habitat:</u> Habitat surrounding the site includes residential dwellings and associated gardens, as well as small pockets of woodland. In the wider landscape, grassland, heathland, and woodland are present. There are no priority habitats present on site, however wood pasture and parkland BAP, traditional orchards, deciduous woodland, ancient woodland, and lowland heathland are present within a 2km radius from the site, with deciduous woodland located 50m to the west of the site.

	Onsite habitats: u1b5- Buildings There are two buildings on site; one residential building and one garage, connected by a interconnected gallery. u1b6 10- Other developed land Hard standing in the form of pathways and patios is present throughout the site. Some Welsh poppy (F) is present growing through cracks in the hardstanding. u1e- Built linear features The site is surrounded by brick walls. g4 - Modified grassland Type 1 – with scattered scrub (10), scattered trees (32) and bare ground (510) Grassland present to the south-east of the site has a sward height range of approximately 10-20cm. Species present include red fescue (D), Welsh poppy (F), speedwell (F), red doc (F), cow parsley (F), ivy (O), wood avens (O), tulips (O), and lords and ladies (O). Some scattered scrub is present as raspberry (F), cherry laurel (O) and forsythia (O). The grassland is damaged from the storage of building material, resulting in areas of bare ground which cover approximately 30% of the grassland. One small lilac tree is present.

	Grassland Condition Assessment: A: There are 6-8 vascular plant species per m2 present, including 2 forbs- pass. B: Sward height is varied- pass. C: Scrub accounts for less than 20% of total area- fail. D: Physical damage is evident in less than 5% of area- fail. E: Cover of bare ground is between 1% and 20% of area- fail. F: Cover of bracken is less than 20%- pass. G: There is an absence of invasive plant species- pass. Scores 4/7 moderate condition Individual Tree Condition Assessment – S4 A. The tree is a native species- fail. B. The tree canopy is continuous- pass. C. The tree is mature- pass. D. There is little evidence of an adverse impact on tree health by humans- pass. E. Natural ecological niches are present- fail. F. More than 20% of the canopy is oversailing vegetation- fail. Scores 3/6 Moderate condition Type 2

	Grassland present to the south-west of the site has a sward length of approximately 15cm. Species present include perennial rye (D), red fescue (A), ragwort (F), dandelion (F), and clover (O). Grassland Condition Assessment: A: There are 6-8 vascular plant species per m2 present, including 2 forbs- fail. B: Sward height is varied- fail. C: Scrub accounts for less than 20% of total area- pass. D: Physical damage is evident in less than 5% of area- pass. E: Cover of bare ground is between 1% and 20% of area- pass. F: Cover of bracken is less than 20%- pass. G: There is an absence of invasive plant species- pass. Total: scores 5/7 Poor condition- fails criterion A u1 32 847- Introduced shrubs with scattered trees Introduced shrub is present to the south-west and north-west of the building, surrounding the pathways and grassland. Species present include foxgloves, spindle, snowdrops, lavender, bird-foot sedge, rosemary, rose *spc.*, and pansies. The flower beds are overgrown with scrub including bramble (F), Welsh poppy (F), nettles (O), and dandelion (O). Scattered trees are also present; two small apple trees, one small magnolia tree, one medium magnolia tree, and one small camelia tree.

Criteria	Species and size	A. The tree is a native species.	B. The tree canopy is continuous	C. The tree is mature	D. There is little evidence of an adverse impact on tree health by humans	E. Natural ecological niches are present	More than 20% of the canopy is oversailing vegetation	Score
T1	Apple - S	P	P	P	P	P	P	Good
S2	Magnolia-S	F	P	P	P	F	P	Mod
T3	Apple- S	P	P	P	P	P	P	Good
S5	Magnolia-M	F	P	P	P	P	P	Good
S6	Camelia-S	F	P	F	P	P	P	Mod

	   
Foreseen Impacts	No impacts to any notable habitats are anticipated as no natural habitats are being removed.
Recommendations	Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012).

	According to the London Borough of Camden, a Biodiversity Net Gain (BNG) Calculation does not need to be completed for this site.
Locality and Designated Sites	
Summary of Survey Findings	There is one designated sites within a 2km radius of the site. Hampstead Heath Woods- Site of Special Scientific Interest (SSSI) The site has many old and over-mature trees, and extensive dead wood which provides a habitat for invertebrates, including the nationally rare jewel beetle *Agrilus pannonicus*. This type of canopy is uncommon nationally and very scarce in Greater London. The main trees are sessile oak and beech, with a few pedunculate oaks and wild service trees. The shrub layer is dominated by holly and rowan. Next to Ken Wood is a small valley which has soft-rush, six sphagnum species and water horsetail. Located 1050m to the north-east of the site. Belsize Wood- Local Nature Reserve (LNR) There is a pond, bird feeding area, large insect house, Stag beetle loggeries, bird boxes and other biodiversity enhancing features. Belsize Wood has a broad diversity of insect species, probably due to a floral diversity within the LNR. Located 1480m to the south-east of the site. Westbere Copse- Local Nature Reserve (LNR) Spring and summer meadows, woodland path, pond with dipping platform, field lab, stag beetle loggeries, bird feeding station. 25 species of birds have been recorded and 150 species of plants. Frogs, toads and

	newts are found here. Foxes. Located 1810m to the south-west. There are 8 Sites of Importance to Nature Conservation (SINCs) within a 2km radius of the site. Hampstead Heath The ancient woodlands contain an exceptional number of old veteran trees. These provide the right type of dead wood habitat for a range of special insects, including the two-spot wood-borer, a nationally rare jewel beetle. The acid grassland on the upper slopes supports heath bedstraw, pill sedge, pignut and other typical plants. The former heathland is being restored in places by planting heather species. Important invertebrates on the heath include the impressive purse-web spider at one of only two known London localities for this species. The ponds and watercourses offer further interesting plants, insects and birds. Rare plants include creeping willow, and lemon-scented and hard ferns. The bog at Kenwood contains several species of bog-mosses as well as water horsetail, which are all very rare in London. In addition, over 300 species of fungi have been recorded on the heath. Kingfishers, reed warblers and all three species of British woodpecker breed here and the Heath's most famous birdwatcher, Bill Oddie, may also be regularly spotted on his local turf. Bats seen foraging here include the declining noctule as well as Daubenton's bat nearer the lakes. Located 100m to the north of the site. Kentish Town City Farm, Gospel Oak Railsides and Mark Fitzpatrick Nature Reserve The railsides are varied and support a mosaic of habitats. The blocks of woodland that have grown back on cleared land are dominated by sycamore with ash and silver birch, interspersed with scrub, grassland and tall flowers. Mark Fitzpatrick Nature Reserve is mostly sycamore woodland with an understorey

	consisting of a variety of native tree and scrub species including elder, hawthorn, holly, dogwood, rowan and hazel. You can also find bluebells and wild garlic, as well as other more common species. A nectar garden has been planted to provide forage for butterflies. In the north-west corner of this area the wild garden supports a variety of planted and self-seeded herbs, and the dominant trees are Lombardy poplars. Kentish Town City Farm has a variety of habitats due, primarily, to its use as an educational resource. Trees present include sycamore, Norway maple, hornbeam, oak, beech and wild cherry, with scrub species including elder, hawthorn, and butterfly-bush. The pond supports emergent yellow iris with great willowherb around the margins. This is home to a healthy population of common frogs. Grassland and grazed areas support tall herbs and ruderal species including herb Robert, common mallow, red and white deadnettle and wood avens. The whole site attracts a varied fauna and this is one of the few places in Camden that still supports a healthy population of house sparrows. Other birds recorded include grey wagtails, crested finch, green finch great, blue and long-tailed tits and wren. Butterflies seen include orange tip, speckled wood, peacock, gatekeeper and holly blue. Greater and lesser stag-beetle benefit from the deadwood habitat present and bats can be seen. Located 1140m to the east. Belsize Wood Local Nature Reserve & Russell Nurseries Woodland Walk The central section of the site is poorly vegetated at ground level with ivy dominating due to trampling. In the northern areas, which now have limited public access, the understorey is chiefly tall specimens of hawthorn and elder with regenerating ash, field maple and wild cherry. Bramble dominates the ground flora in the northern area with herbs of greater willowherb, enchanter's nightshade and bittersweet. Trees of ash, sycamore, wild cherry and common lime are the most common canopy trees in the north and central areas with a large Swedish whitebeam prominent in the central area. There is an amazing difference in the

	southern part of the reserve where access is limited. The area is relatively species rich with a canopy of wild cherry, sycamore, field maple, ash and oak, and an understorey of hazel, English elm and dogwood. The ground flora of tall herbs is diverse with shade-tolerant species such as wood avens, enchanter's nightshade, cow parsley and tutsan, with species of more open habitat including greater stitchwort, red campion and sanicle. A small pond supports yellow iris and marsh marigold on the margins, with the floating aquatic species lesser duckweed and water-starwort. The site regularly hosts numbers of birds such as great tit, blue tit, long-tailed tit, wren, robin, great spotted woodpecker, blackbird and the song thrush which has dramatically declined in London. Located 1480m to the east. Kilburn Grange Park Among the many mature trees are a high proportion of native species, such as silver birch, London Plane, hornbeam, ash, yew, holly and sessile oak. Exotic species include tree-of-heaven, hybrid black-poplar, common lime and sycamore. Dense planted shrubberies around the perimeter also include some native species, such as hazel, dogwood and hawthorn. A small fenced area located on the east side of the children's playground supports dense scrub and a second fenced area in the north-west corner of the park supports trees and tall herbs. The trees and shrubs provide nesting habitat for a range of common garden birds such as blackbird, robin and starling. Located 1900m to the south. Hampstead Parish Churchyard In the southern section of the site a good number of mature trees are present, the most frequent being yew, followed by sycamore, holly, a huge horse chestnut and areas of dense planted shrubs. The grassland is dominated in places by perennial rye-grass, but other species present include rough-stalked meadow-

	grass, meadow foxtail, sweet vernal-grass, red fescue, cuckoo flower and common cat's-ear. Field wood-rush and common sorrel are locally abundant. This is indicative of old slightly acidic meadowland. The northern section, St. John's Additional Burial Ground, is more open and supports a slightly different suite of species, including mature yews, Turkey oak, sessile oak, beech, copper beech, wild cherry and sweet chestnut. Grassland species include meadow buttercup and pignut, an indicator of acid conditions. There are patches of diverse and well-established tall herbaceous plants, which includes both native species and exotic ones planted on graves. Some of the older tombstones, particularly those composed of limestone, have a covering of various mosses and lichens, as well as a number of types of fern including hart's-tongue and the uncommon lady-fern. Located 260m to the south. West Hampstead Railsides, Medley Orchard and Westbere Copse Local Nature Reserve The railsides are covered in a complex of scrub with elder, dogwood, bramble, hawthorn and English elm, and secondary woodland with sycamore, grey poplar, wild cherry, ash and horse chestnut. More open areas support false oat-grass with a variety of tall herbs including cow parsley, green alkanet and bittersweet, white deadnettle and garlic mustard. A small part of this stretch is Westbere Copse Local Nature Reserve which is mainly composed of sycamore, oak, ash and aspen. There is an understorey of snowberry, elder, English, blackthorn and hawthorn. The ground flora includes shade tolerant species such as cow parsley, nettle, ivy and bramble. In areas with less shade these are joined by common toadflax, Canadian goldenrod and Michaelmas-daisy. The London notable species common broomrape has been recorded here. Common birds along the railside include blue tit, great tit, robin, blackbird, wren and dunnock. There is also a small pond and spring as well as summer wildflower meadows. The Jane Evans Nature Reserve (formerly Minster Road Nature Reserve) is on the opposite bank of the railway and contains a wildflower meadow, a pond

	and an orchard planted by the local community. The Medley Orchard is an old orchard, a rare habitat in London, and the fruit trees can support important communities of insects. Medley Orchard is now largely secondary woodland of ash, but a few old fruit trees survive. Located 1080m to the south. Hampstead Cemetery Among the mature trees ash is particularly common. Other species include yew, sycamore, Norway maple, silver birch, Lombardy poplar, Pissard's plum and Swedish whitebeam. In a few places these have been allowed to regenerate freely and are now forming small patches of woodland. Birds recorded in the cemetery include jay, green woodpecker, long-tailed tit, goldcrest, willow warbler and linnet. In the north eastern half of the cemetery is a wildlife area and woodland, which is dominated by field maple with elder, yew and hawthorn, with a ground flora of ivy. Small white, speckled wood, holly blue, meadow brown and small copper butterflies have been recorded here. In the northwest of the site a wildflower meadow has been sown. Located 1070m to the west. Branch Hill The largest individual block of woodland is Oak Hill Wood. This woodland has grown up over previously cleared ground and contains numerous mature trees including hornbeam, horse chestnut, yew, beech, sweet chestnut, oak and ash. Amongst the understorey species are holly, elder and cherry laurel. Connected to Oak Hill Wood by wide avenues of common lime, poplar and yew is a smaller area of woodland and scrub in the northwest corner of the site. It is dominated by sycamore with an understorey in which holly is abundant and accompanied by a small number of species including hawthorn, elder, cherry laurel and bramble. To the south are the grounds of Oak Hill House, mostly composed of sycamore and oak

	woodland. To the northeast is another large house with wooded grounds and a high density of mature trees. This connects to the private wooded area beside Firecrest Drive, which is chiefly composed of sycamore, oak, yew and lime. Adjacent to Frognal Rise and Oak Hill Way are the well-used Branch Hill Allotments. A good number of birds visit the site including jay, great spotted woodpecker, tawny owl, nuthatch, goldcrest, long-tailed tit and kestrel. Located 10m to the west.
Foreseen Impacts	Branch Hill SINC is located 10m to the west of the site. Due to the small size of the project, limited impacts are foreseen, however indirect effects such as pollution or tree damage could occur during construction.
Recommendations	Best practice measures to minimise the possibility of pollution must be implemented during construction.
Invasive / Non-native species	
Summary of Survey Findings	No problematic invasive and non-native species recorded on site.
Foreseen Impacts	None.
Recommendations	No further surveys but remain vigilant.
Invertebrates	
Summary of Survey Findings	Grassland and scrub on site will provide good habitat for a common assemblage of invertebrates, such as pollinator species.
Foreseen Impacts	The proposed plans will not remove any natural habitat as works are only impacting hard standing. Furthermore, landscaping plans will improve invertebrate habitat on site.
Recommendations	No further surveys.
Bats	
Summary of Survey Findings	The site is surrounded by residential properties with vegetated gardens which could be used by bats for foraging and woodland which could be used by bats to roost. These habitats could connect the site to the wider landscape. The wider landscape has woodland, heathland and grassland present, which provide

	good foraging and roosting opportunities. Scrub, introduced shrub, and trees on site provide good foraging habitat for bats. There are three EPSLs present within a 2km radius of the site: • For the destruction of a common pipistrelle and soprano pipistrelle day roost located 1210m to the south. • For the destruction of a soprano pipistrelle maternity roost located 1260m to the north. • For the destruction of a common pipistrelle day roost located 1520m to the south-west. Trees S5 will be removed by the proposed plans. S5 is a medium magnolia tree which has no roosting features such as raised bark or cavities. S4 has negligible roosting habitat for bats due to the lack of roosting features.
Foreseen Impacts	S4 Bats are very unlikely to be roosting within this tree and as such, there are not anticipated to be any impacts on roosting bats as a result of the felling of this tree.
Recommendations	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. Enhancements:

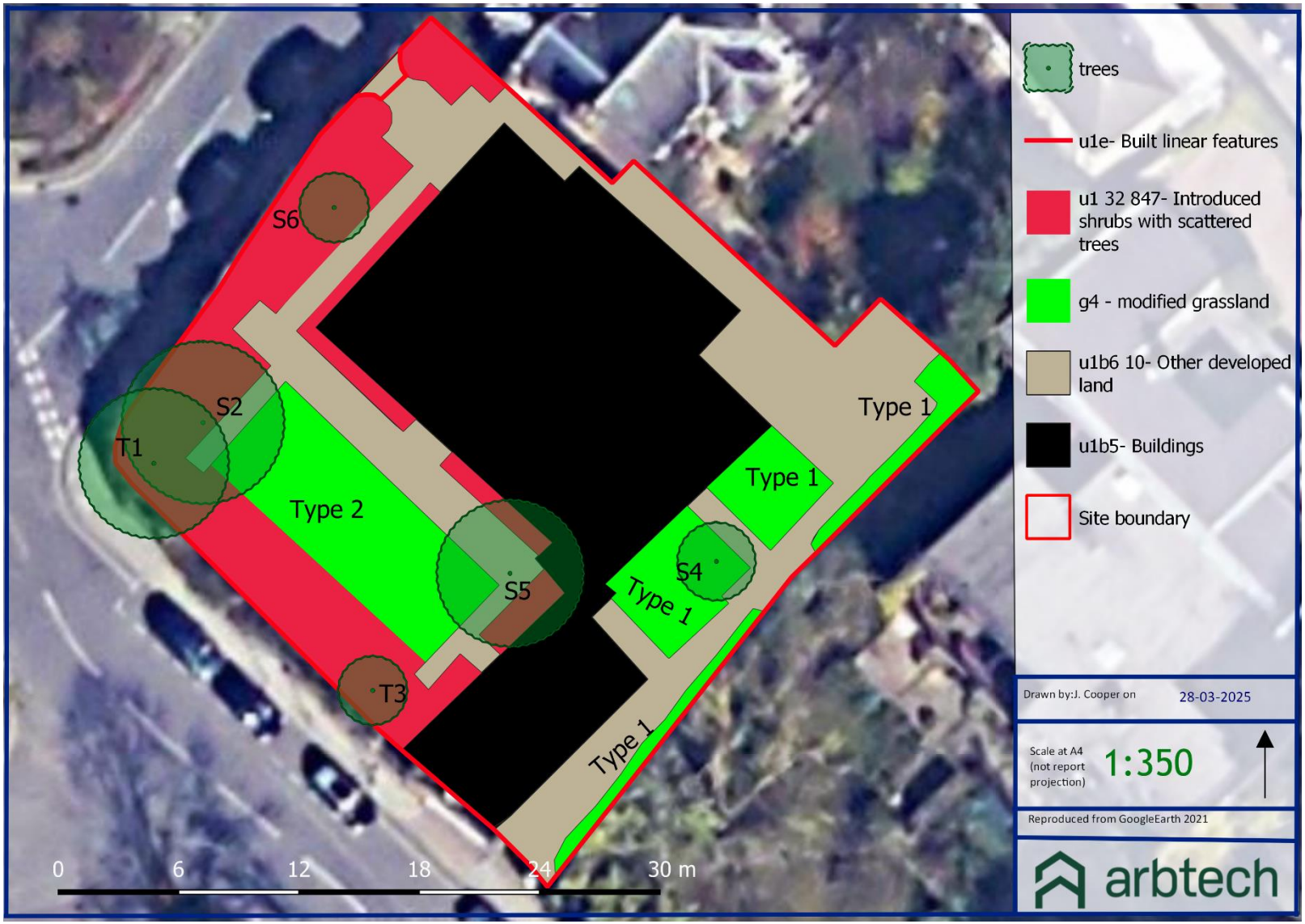
	To enhance roosting opportunities for bats, one bat box should be installed on the proposed buildings. It should be positioned at least 3–5 meters above ground level, in a sheltered location away from artificial lighting, and ideally facing south, southeast, or southwest to maximize exposure to sunlight.
Birds	
Summary of Survey Findings	A nest was found within the basement nearby to an open window. Additionally, birds could use the scattered trees and introduced shrub for nesting. No habitat for schedule 1 birds was observed.
Foreseen Impacts	The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests due to the removal of S5.
Recommendations	Any vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. Enhancements: To enhance nesting opportunities for birds, a bird box should be installed on the existing building. It should be positioned at least 2–4 meters above ground level, away from direct sunlight, prevailing winds, and artificial lighting.
Reptiles	

Summary of Survey Findings	Scrub and introduced shrub on site would provide optimal habitat for reptiles for refuge, whilst the grassland would provide good basking habitat. There is good habitat in the wider landscape due woodland and grassland. However, the site is disconnected from the wider landscape by roads, buildings, fences, gardens, and other areas of hard standing. No EPSLs for reptiles are present within a 2km radius of the site.
Foreseen Impacts	No natural habitats will be removed from the site. Furthermore, there is limited connectivity in the local area, meaning an unlikely presence of reptiles. Therefore, no impacts are expected.
Recommendations	None.
Amphibians	
Summary of Survey Findings	Woodland and grassland in the wider landscape would provide good habitat for GCN and common amphibians for refuge and foraging. One pond is located 250m to the north of the site, but is disconnected to the site by busy roads, buildings, and fences. Although the site provides good habitat for GCN due to the presence of scrub, the area is poorly connected due to roads, residential dwellings, fences, and areas of hard standing. No EPSLs are present within a 500m radius of the site.
Foreseen Impacts	As GCN are typically found within terrestrial habitats up to 500m from connected breeding ponds (Langton *et al.* 2001), the presence of GCN is unlikely due to the pond being disconnected from the site. Additionally, no natural habitat will be removed according to the proposed plans, therefore, no impacts to GCN or other common amphibians is expected.
Recommendations	None.
Badger	
Summary of Survey Findings	No evidence of badgers was found on or within 30m of the site. Grassland and scrub on site can provide good foraging and commuting habitat for badgers. There is poor connectivity to the wider landscape due

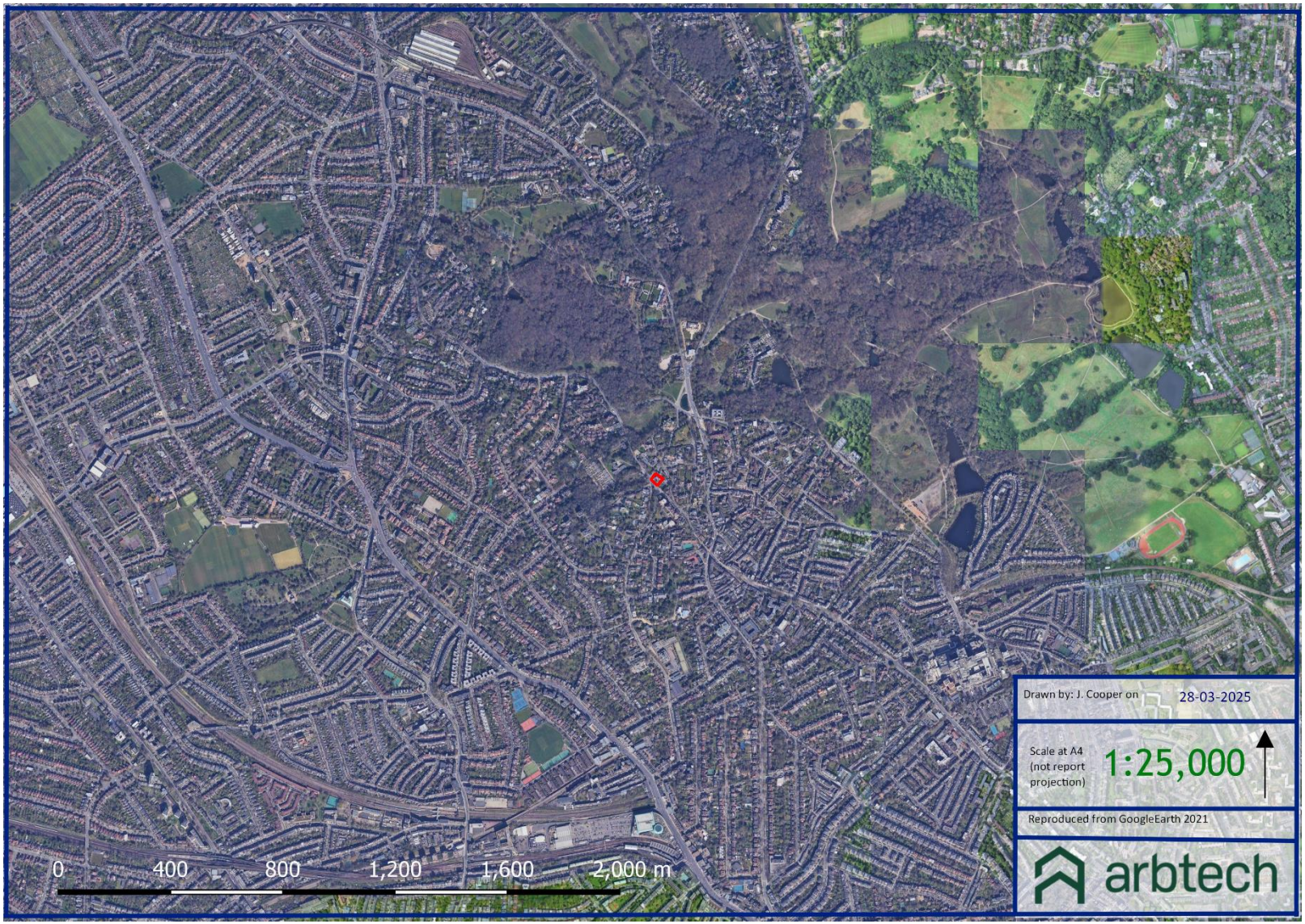
	to roads, buildings, fences, and areas of hard standing. However, badgers are highly mobile and could access the site by road, or over walls.
Foreseen Impacts	No natural habitat will be removed. However, construction activities could result in the death or injury of badgers, if present.
Recommendations	Basic precautionary mitigation during works is recommended: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to habitats which badgers could use. South and west boundaries. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. In the unlikely event that a badger sett is identified within 30m, works must cease and advise must be sought from a suitably qualified ecologist.
Riparian animals	
Summary of Survey Findings	There are no watercourses or riparian habitat present on or connected to the site.
Foreseen Impacts	No impacts are anticipated on riparian animals as a result of the proposed development.
Recommendations	None.
Hazel dormouse	
Summary of Survey Findings	There is no suitable habitat on site for hazel dormouse. Additionally, for isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright *et al.* 1994). There is not 20ha of woodland connected to the site. There are no dormouse European Protected Species License (EPSL) within 2km.

Foreseen Impacts	No impacts are anticipated on hazel dormice as a result of the proposed development due to the lack of suitable habitat connected to the site.
Recommendations	None.
Other e.g. hedgehog	
Summary of Survey Findings	Grassland and scrub on site can provide good foraging and commuting habitat for hedgehogs. There is poor connectivity to the wider landscape due to roads, buildings, fences, and areas of hard standing. However, hedgehogs are highly mobile and could access the site by road, or under fences.
Foreseen Impacts	No natural habitat will be removed from site. However, construction activities could result in the death or injury of hedgehogs, if present.
Recommendations	The precautionary working method used for badgers will also protect hedgehogs.

Appendix 1: Habitat map



Appendix 2: Location map



Appendix 3: Proposed plan

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